

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
13 October 2005 (13.10.2005)

PCT

(10) International Publication Number  
**WO 2005/094803 A3**

(51) International Patent Classification<sup>7</sup>: **A61K 31/4439**,  
A61P 35/00

(21) International Application Number:  
PCT/US2005/009758

(22) International Filing Date: 23 March 2005 (23.03.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/556,219 24 March 2004 (24.03.2004) US

(71) Applicant (for all designated States except US): **GEN-  
PATH PHARMACEUTICALS, INC.** [US/US]; 300  
Technology Square, 7th Floor, Cambridge, MA 02139  
(US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **GYURIS, Jenó**  
[HU/US]; 171 Swanton Street, #5, Winchester, Massa-  
chusetts 01890 (US). **O'HAGAN, Ronan C.** [CA/US];  
11 Nicod Street, Arlington, Massachusetts 02476 (US).  
**HAN, May** [CN/US]; 46 Browne Street, Apt. 3, Brook-  
line, Massachusetts 02446 (US). **ROBINSON, Murray**  
[US/US]; 1200 Washington Street, #505, Boston, Mass-  
achusetts 02118 (US). **WEILER, Solly** [US/US]; 12  
Summit Road, Southborough, Massachusetts 01772 (US).

(74) Agents: **HALEY, James, F., Jr.** et al.; Fish & Neave IP  
Group, ROPES & GRAY LLP, 1251 Avenue of the Ameri-  
cas, New York, New York 10020 (US).

(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ,  
TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA,  
ZM, ZW.

(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,  
SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,  
GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

- with international search report
- before the expiration of the time limit for amending the  
claims and to be republished in the event of receipt of  
amendments

(88) Date of publication of the international search report:  
1 December 2005

For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: N3-PYRIDYL-THIAMINE AND ITS USE IN CANCER TREATMENTS

(57) Abstract: The invention provides methods using N3-pyridyl-thiamine compounds and pharmaceutical compositions compris-  
ing N3-pyridyl-thiamine, which are especially useful for preventing or reducing tumor growth *in vivo*. The invention is also directed  
to the benefits of reducing thiamine concentrations, *e.g.*, by means of a thiamine reduced diet, as an effective step in a therapeutic  
regime for patients treated with N3-pyridyl-thiamine.



WO 2005/094803 A3